

## Fruit Industry Outlook – 2009 (Retrospective) / 2010

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**Summary:** Weather impacted Colorado fruit crops in 2009, with spring frost eliminating the apricot and Japanese plum crops and reducing the estimated peach crop to 65-70% and the cherry crop to 50%. Estimated apple and pear production was about 90 - 95%, while wine grape production was nearly 100% with an estimated 1,800 - 2,000 tons despite some hail damage in May. Estimated crop values ranged from \$10 million for peaches to \$6 million for apples to \$1.2 million for pears and \$2.4 - 2.8 million for grapes. Value of 2009 wine vintage is projected to be around \$24 - 28 million based on use of a conservative 10x multiplier. Peaches continue to lead all fruit in acreage (~2,200 acres), apples a distant second at ~1,300 acres, and wine grapes a close third at ~ 1,000 acres. Challenges for 2010 include winter cold injury in November - December 2009 to stone fruit buds and grapevines, agricultural labor availability, potential increased costs for fuel and fertilizer, maintaining fruit quality and size, marketing, and continued vigilance to minimize crop injury and loss from cold, pests, and birds.

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The 2009 crop year was a difficult one for stone fruit, a reasonable one for pome fruit, and a good year for wine grapes. Early spring brought damaging frosts, late spring saw local hail damage, and fall / winter brought injury for the 2009 crops. Late March and early April had a series of storms with very cold temperatures (9 - 17°F) and up to 4" of dry snow just about the time of 1<sup>st</sup> bloom for stone fruit. Stone fruit growers faced the difficult choice of whether to run their wind machines and orchard heaters or not, unable to be confident that their efforts would be effective in protecting their crop. After the storms had passed, peach bud evaluations were not conclusive on whether they were successful. Thinning decisions typically made at bloom were difficult; some opted to thin as usual at full bloom and do touch-up thinning in mid-June, others to wait until after shuck fall so that they could more clearly see what crop they had, and still others opted to not thin at all. Apples & pears were not as far along and less at risk than the stone fruit crops, and grapes were even more dormant at the time and had little risk of damage; thus, they avoided these difficult decisions. But individual vineyards then encountered hail in May that reduced their crop.

It quickly became apparent that the apricot crop was largely gone, no flowers escaped the brutal cold. Similarly, the Japanese plum crop was mostly wiped out. Sweet and tart cherry crops were reduced to about 50% or less of normal in Mesa County, while those crops fared better in Delta County. European plums also wound up being only about 50 - 60% of a normal crop in Mesa County. Peach and nectarine production varied with location and variety; overall peach production for the state wound up at approximately 65-70% of normal, while nectarine production was closer to 35% of normal. Some peach fruit that survived the cold exhibited freeze damage at maturity and wound up being left on the orchard floor.

Apple and pear crops were less impacted. Apple production was about 90 - 95% of normal, pear production was about the same. Some apple and pear fruit also exhibited frost injury damage at maturity and was left on the orchard floor. Some fruit had hail damage during summer months.

With the limited stone fruit crop availability, all fruit (including off-grade fruit with adequate quality to pack) had ready markets and better prices (up 3 - 5 cents/lb through the packing sheds) than in 2008. Fruit size tended to be larger and was an additional positive factor for marketing. The level of demand for Colorado peaches remained strong, and the feeling among packers was that they would not have had any problem marketing a full crop had such been available. Crop valuation for peach in 2009 was estimated at \$10 million.

Apple and pear markets also remained strong in 2009, as short crops elsewhere provided marketing opportunity for Colorado fruit. Fruit damaged by hail was largely diverted to processor outlets or sold as seconds. Prices for both apples and pears held a bit above those received in 2008. Crop valuations for 2009 were estimated at \$6 million for apple and \$1.2 million.

Grape producers, in contrast, had a good to excellent year, despite some damage from hail in May. Production was estimated to be between 1,800 and 2,000 tons – very similar to or even possibly exceeding the record production in 2008. Prices were comparable to 2008, and all of the crop was sold. Quality of the juice generally was viewed by winemakers as being very good to outstanding. The wines resulting from the 2009 crop should compete well in the marketplace with wines from other areas once they reach the tasting rooms. With prices comparable to 2008, crop valuation was estimated at \$2.2 - 2.8 million. With a conservative 10x value-added multiplier, valuation of the wine for the 2009 crop was estimated at \$22 - 28 million.

Crop acreages remain about the same as in 2009. Peaches lead the way with the greatest acreage at an estimated 2,200 acres, apples are second with an estimated 1,300 acres, grapes third with an estimated 1,000 acres. Pears and sweet cherry follow with an estimated 300 acres each, and tart cherry at an estimated 50-100 acres; apricot and plum acreage is estimated to be less than 50 acres each.

Challenges faced by fruit producers and vintners for 2010 will include dealing with a short crop for wine grapes and stone fruit. A mid-November freeze following an extended period of temperatures in the mid-60's to mid-70's was followed by 5" of snow and several days (Dec.9 - 11) of sub-zero temperatures (-7 to -13 °F; temperatures west of Grand Junction reached -20 °F or colder). In some of the colder locations, grapevines were killed to the snow line and stone fruit buds were totally killed or severely reduced. The impact on grape and stone fruit production for 2010 will not be fully known until after bloom; the prolonged cold delayed accumulation of chill units required for completion of rest and precludes evaluation provided by keeping shoot cuttings in water at room temperature for 10 - 14 days. Preliminary peach bud assessment provided by cutting and examining flower buds for killed pistils found surviving buds to range from 10% to 45% of the buds on the shoots. Damage incurred from the extreme cold will depend on crop, variety, and orchard block location. Damage in Delta County was less than damage observed in orchards and vineyards in Mesa County; for example, grapes at the Rogers Mesa site of the Western Colorado Research Center (WCRC) still had a full crop potential while the grapes at the WCRC–Orchard Mesa site were killed to the snow line. This likely is a reflection of the different temperatures experienced by these two sites during the sub-zero cold (-7 vs. -13 °F for the WCRC–RM and WCRC–OM sites, respectively). The majority of grape acreage is in Mesa County, and the impact of the cold could result in a crop that is only 50% of what was harvested in 2008 and 2009; the hope is that this is an overestimate of the damage and that grape production will be above that level in 2010. Peach production for 2010 also is likely to be 70% of normal or less, while apple and pear production appears unlikely to be impacted. Likely production of other stone fruits (apricot, cherry, and plum) is unknown at this time.

Finally, the cold winter temperatures are likely to result in a delay in fruit bud development and bloom, especially in Mesa County. This could be a delay up to 14 days later than normal for Mesa County orchards and vineyards, up to 7 days later for the lower elevation areas of Delta and Montrose Counties, and only a couple of days (at most) for the higher elevation orchards in Delta and Montrose Counties. However, harvest dates are likely to be delayed only 4 - 7 days in Mesa County and less elsewhere.